REPAIR AND REPLACEMENT OF ARCHITECTURAL METALS

There is surprisingly little use of architectural metals in older Virgin Islands buildings. The main reason, simply, has always been the high cost. There are, nonetheless, a number of exceptions, and several fine examples of architectural metalwork do exist. Also, most buildings incorporate metal into other features such as shutters, hinges, brackets, and door hardware. Therefore, the proper preservation -- and, in some cases, the selection -- of architectural metals are important issues.

Repairs to Architectural Metals:
Repairs to metal work should be undertaken before replacement. Both cast (rare in the Virgin Islands) and wrought iron can be patched and repaired in place, and this practice should generally be followed.

Maintenance:
Architectural metals are extremely subject to deterioration, especially when unprotected by paint. The key to good preservation is constant maintenance -- especially in a marine environment such as the Virgin Islands. Metals should be cleaned periodically, wire-brushed, or sanded (and in some cases sandblasted) to remove all traces of rust. The metal work should then be painted with a good-quality metal primer before repainting. Never paint over existing rust spots.

Replacement Metalwork:
Replacement hinges, pintles, and hooks and eyes for shutters and doors should be duplicated accurately whenever possible. If the cost is too high, simple wrought iron strap hinges may be substituted. These should be painted to blend in with the...
Original hardware is important to the "historic value" of older buildings. Always, existing hinges, hooks and other hardware should be reused or, where pieces are missing, duplicated during repair or rehabilitation work.

Examples of historic hinge and hook types.

Metal Brackets:
Metal brackets for balconies or signs, following traditional shapes, can be easily obtained or made-up by local metal workers. Care should be taken to duplicate other old examples in the islands, if none can be found on the building.

Security Grills:
One of the main uses for architectural metals is for protective grillwork. Traditionally, there was little use of metal grills for security in the Virgin Islands. Window shutters were simply barred from the inside at night to ensure safety; during the day, at least on commercial buildings, simple horizontal bars were used. These were sometimes of metal, but more often, of wood.

When a window opening needs to be protected, the simplest solution is usually the best one. Wrought iron bars, ideally square in section and set into the frames horizontally, are a good traditional solution to security needs. For maximum protection, the bars should be set directly into the masonry.

Ornate, decorative grillwork is completely out of character with traditional buildings in the Virgin Islands, and should be avoided. Most of this iron-work is not particularly strong and is less effective than simple iron bars. Another solution, however, if a more decorative treatment is sought, is simple, plain-designed grillwork of a generally contemporary character. There are several contractors and craftsmen capable of this kind of work, and their design can often add greatly to the quality of a rehabilitation job.

Security grills should be kept as simple as possible. The use of historic metal grill such as that shown on the left is one possible solution. Horizontal metal or even wood bars, shown on the right, is another.

For further information contact:
The Division for Archaeology and Historic Preservation
Virgin Islands Department of Planning and Natural Resources
Nisky Center, Suite 231
#45 Estate Nisky
St. Thomas, Virgin Islands 00802
(809) 774-3320
or
115 Watergut Homes
Christiansted, St. Croix 00820
(809) 773-7081

Produced by William Chapman
Layout by Jeannie Strong